

# Prep Math Curriculum

## Autumn term

topic	Objectives: children will be taught to
Counting	Say and use number names beyond 10 in order in familiar contexts, eg number rhymes, songs, stories.
Comparing and ordering numbers	Recite number names in order, continuing from 2, 3 or 4. Order a given set of numbers (eg 1-6 given in random order).
Counting Adding and subtracting	Count reliably up to 12 objects. Begin to use the language involved in adding. Begin to relate addition to combining two groups of objects, counting all the objects. Separate (partition) a given number of objects into 2 groups.
Shape and space  Reasoning	Begin to name solids and flat shapes. Use shapes to describe and make models, pictures, patterns. Solve simple problems or puzzles in a practical context. Match objects (shapes).
Counting Measures	Recite the number names in order, counting back from 6, 5 or 4. Use language such as more or less, longer or shorter, heavier or lighter (length, mass, time) to make direct comparisons of two quantities.
Counting Adding and subtracting  Money and 'real life' problems	Count reliably up to 12 objects, claps or hops. Begin to use the language involved in subtracting Relate subtraction to taking away, counting how many are left. Sort coins: 1c, 2c, 5c.
Assess and review	

Counting and reading numbers  Comparing and ordering numbers	Say and use number names up to 20 in order in familiar contexts, eg number rhymes, songs, stories. Recognise numerals 1 to 3 Compare two numbers. Say a number that lies between two given numbers up to 10 (then beyond)
Counting and reading numbers  Adding and subtracting	Count reliably up to 15. Recognise numerals 1 to 5. Recognise small numbers without counting. Relate addition to combining 2, then 3 groups. Relate addition to counting on.
Shape and space  Reasoning	Talk about, recognise and recreate simple patterns, including patterns in the environment Use everyday words to describe position and direction.
Counting and reading numbers  Measures, including time	Recite the number names in order, counting on or back from 10 or 9 Recognise numerals 1 to 9 Make direct comparisons of 2 then 3 or more lengths or masses. Know the days of the week in order.
Counting and reading numbers Adding and subtracting Money and 'real life' problems	Count reliably to 20. Recognise numerals 0 to 9. Relate addition to counting on. Understand and use the vocabulary related to money. Sort coins: 1c, 2c, 5c, 10c, 20c. Use 1p coins in role play. Sort and match objects, justifying decisions made.
Assess and review	

# Prep Math Curriculum

## Winter term

Topic	Objectives: children will be taught to
Counting, reading and writing numbers Comparing and ordering numbers	Say and use number names beyond 20 in order in contexts, eg number rhymes, songs, counting games and activities. Order a given set of selected numbers, eg 2, 5, 8, 1,4
Counting, reading and writing numbers Adding and subtracting	Count reliably to 20 and beyond (objects and other contexts). Recognise numerals 0 to 10. Record numbers by making marks. Begin to relate addition of doubles to counting on. Find a total by counting on when one group is hidden.
Shape and space Reasoning	Talk about and recreate symmetrical patterns found in the environment and in different cultures. Make simple estimates and predictions
Counting, reading and writing numbers Measures	Write numerals to 5 Count and record larger numbers by tallying Compare lengths, masses and capacities by direct comparison
Counting, reading and writing numbers Adding and subtracting Money and 'real life' problems	Count in tens. Recognise numerals beyond 10 Remove a smaller number from a larger and find how many are left by counting back from the larger number. Sort all coins, including €1 and €2, and use in role play. Solve practical problems.
Assess and review	

Counting, reading and writing numbers Comparing and ordering numbers	Estimate a number up to 10 and check by counting. Write numerals to 10. Begin to understand and use ordinal numbers in different contexts.
Counting, reading and writing numbers Adding and subtracting	Count in twos. Select two groups of objects to make a given total. Begin to find how many have been removed from a group of objects by counting up from a number
Shape and space Reasoning	Use everyday words to describe position, direction and movement. Sort and match objects, shapes and pictures, justifying the decisions made.
Counting, reading and writing numbers Measures, including time.	Begin to write numerals to 20. Estimate a number beyond 10 and check by counting. Begin to read o'clock time.
Counting, reading and writing numbers Adding and subtracting Money and 'real life' problems	Count in tens. Count beyond 20 in twos. Use numerals to record numbers. Work out by counting how many more are needed to make a larger number. Use coins in role play to pay and give change. Make simple estimates and predictions
Assess and review	

# Prep Math Curriculum

## Summer term

EVERY DAY: Practise and develop oral and mental skills (e.g. counting, mental strategies, rapid recall of + and – facts)	
<b>Count reliably up to 10 objects.</b> <b>Count on in ones from any small number.</b> <b>Read and write numerals to at least 10</b>	<b>Recall addition doubles up to 5+5</b> <b>Recall addition and subtraction facts up to 5.</b> <b>Recall pairs of numbers which total 10</b>

Topic	Objectives: children will be taught to
Counting, properties of numbers and number sequences	Know the number names and recite them in order to at least 20 Count reliably at least 20 objects. Count on in ones from any small number
Place value and ordering	Read numerals from 1 to at least 20 Write numerals from 1 to 10 Say the number that is one more or less than a given number to 20 Begin to know what each digit in a two-digit number represents. Partition a 'teens' number into tens and ones.
Understanding + and –	Understand the operation of addition; recognise that addition can be done in any order.
Mental calculation strategies (+ and –)	Understand the operation of subtraction (as take away) Begin to use +, - and = signs to record mental calculations in a number sentence. Put the larger number first.
Money and 'real life' problems Making decisions	Count on in ones, including beyond 10, eg 7 + 5. Recognise 1c and 2c coins. Find totals up to 10c. Choose and use the appropriate number operation and mental strategy to solve problems.
Measures, including problems	Understand and use the vocabulary related to length and time. Order familiar events. Compare two, then more, lengths using direct comparison. Measure lengths using uniform non-standard units or standard units, eg metre stick. Use everyday language to describe features of familiar 2-D and 3-D shapes referring to shapes with flat faces.
Shape and space Reasoning about shapes	Make and describe models, patterns and pictures using construction kits. Recognise simple patterns. Use one or more shapes to make repeating patterns. Use everyday language to describe a position.
Assess and review	

<b>Count reliably up to 20 objects.</b> <b>Count on or back in ones from zero, then any small number</b> <b>Read and write numerals to at least 10</b>	<b>Order two numbers (up to 10)</b> <b>Recall addition and subtraction facts up to 5</b> <b>Recall addition doubles up to 5 + 5</b> <b>Recall pairs of numbers which total 10</b>
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Counting, properties of numbers and number sequences Reasoning about numbers	Know the number names and recite them in order to at least 20, from and back to zero. Count on or back in ones from any small number. Solve mathematical problems. Recognise and predict from simple patterns and relationships.
Place value, ordering, estimating	Read and write numerals from 0 to 20 Say the number that is 10 more than any given number to 20. Understand the vocabulary of comparing and ordering numbers, including ordinal numbers to at least 10. Use = sign.
Understanding + and –	Understand the vocabulary of estimation and give a sensible estimate of up to 10 objects.
Mental calculation strategies (+ and –)	Understand the operation of addition and of subtraction (as difference) and use the related vocabulary.
Money and 'real life' problems Making decisions	Use patterns of similar calculations. Find small differences, counting up. Choose and use the appropriate number operation (counting, add, subtract) and mental strategies to solve simple problems.
Measures and time, including problems	Suggest suitable (non) standard units and measuring equipment to estimate, then measure length, recording estimates and measurements as '3 and a bit'. Solve simple problems involving length or time. Know days of the week.
Handling data	Read time to hour on analogue clocks. Solve a problem by sorting information using objects or pictures.
Assess and review	